

Table 10.5 Number of Establishments with Capability to Switch Residual Fuel Oil to Alternative Energy Sources, 2006;**Level: National Data;****Row: NAICS Codes;****Column: Energy Sources;****Unit: Establishment Counts.**

| | | Residual Fuel Oil(b) | | | Alternative Energy Sources(c) | | | | | | |
|---------------------|--|----------------------|------------|----------------|-------------------------------|-------------|---------------------|------|-----|----------------------|----------|
| NAICS Code(a) | Subsector and Industry | Total Consumed(d) | Switchable | Not Switchable | Electricity Receipts(e) | Natural Gas | Distillate Fuel Oil | Coal | LPG | Coal Coke and Breeze | Other(f) |
| Total United States | | | | | | | | | | | |
| 311 | Food | 326 | 178 | 23 | 0 | 150 | Q | 0 | Q | 0 | W |
| 3112 | Grain and Oilseed Milling | 15 | 8 | 5 | 0 | 8 | 0 | 0 | 0 | 0 | 0 |
| 311221 | Wet Corn Milling | W | 0 | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31131 | Sugar Manufacturing | 11 | W | W | 0 | W | W | 0 | 0 | 0 | 0 |
| 3114 | Fruit and Vegetable Preserving and Specialty Foods | 13 | 10 | W | 0 | 8 | 3 | 0 | W | 0 | 0 |
| 3115 | Dairy Products | 25 | 19 | 4 | 0 | 4 | Q | 0 | W | 0 | 0 |
| 3116 | Animal Slaughtering and Processing | 45 | Q | 8 | 0 | Q | 0 | 0 | 0 | 0 | W |
| 312 | Beverage and Tobacco Products | 15 | 12 | 7 | 0 | 12 | W | 0 | 0 | 0 | 0 |
| 3121 | Beverages | 8 | 8 | W | 0 | 8 | 0 | 0 | 0 | 0 | 0 |
| 3122 | Tobacco | 7 | 4 | W | 0 | 4 | W | 0 | 0 | 0 | 0 |
| 313 | Textile Mills | 116 | 90 | 25 | 0 | 90 | 0 | 0 | 0 | 0 | 0 |
| 314 | Textile Product Mills | 23 | 10 | W | 0 | 5 | W | 0 | 0 | 0 | 0 |
| 315 | Apparel | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 316 | Leather and Allied Products | 3 | 0 | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 321 | Wood Products | 103 | Q | 11 | 0 | W | Q | 0 | 0 | 0 | W |
| 321113 | Sawmills | 9 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3212 | Veneer, Plywood, and Engineered Woods | 3 | 0 | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3219 | Other Wood Products | 86 | W | 0 | 0 | 0 | W | 0 | 0 | 0 | W |
| 322 | Paper | 208 | 105 | 95 | W | 92 | 12 | W | W | 0 | 8 |
| 322110 | Pulp Mills | 12 | 5 | 6 | 0 | 4 | W | 0 | W | 0 | W |
| 322121 | Paper Mills, except Newsprint | 87 | 46 | 52 | 4 | 40 | 4 | 4 | W | 0 | 4 |
| 322122 | Newsprint Mills | 3 | 0 | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 322130 | Paperboard Mills | 61 | 37 | 29 | W | 31 | 7 | 5 | 0 | 0 | W |
| 323 | Printing and Related Support | Q | 0 | Q | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 324 | Petroleum and Coal Products | 98 | 77 | 13 | 0 | 12 | 65 | 0 | 4 | 0 | W |
| 324110 | Petroleum Refineries | 31 | 16 | 13 | 0 | 12 | 4 | 0 | 4 | 0 | W |
| 324199 | Other Petroleum and Coal Products | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 325 | Chemicals | 91 | 54 | 17 | 0 | 50 | 11 | W | 0 | 0 | 0 |
| 325110 | Petrochemicals | W | W | W | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 325120 | Industrial Gases | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 325181 | Alkalies and Chlorine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 325182 | Carbon Black | W | W | 0 | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 325188 | Other Basic Inorganic Chemicals | 10 | 4 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| 325192 | Cyclic Crudes and Intermediates | W | W | W | 0 | 0 | W | 0 | 0 | 0 | 0 |
| 325193 | Ethyl Alcohol | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 325199 | Other Basic Organic Chemicals | 16 | 8 | 4 | 0 | 7 | 4 | 0 | 0 | 0 | 0 |
| 325211 | Plastics Materials and Resins | 4 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| 325212 | Synthetic Rubber | W | W | 0 | 0 | W | W | 0 | 0 | 0 | 0 |
| 325222 | Noncellulosic Organic Fibers | 13 | 13 | 0 | 0 | 13 | W | W | 0 | 0 | 0 |
| 325311 | Nitrogenous Fertilizers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 325312 | Phosphatic Fertilizers | W | 0 | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3254 | Pharmaceuticals and Medicines | 24 | Q | 3 | 0 | Q | W | 0 | 0 | 0 | 0 |
| 325412 | Pharmaceutical Preparation | 16 | Q | 3 | 0 | Q | W | 0 | 0 | 0 | 0 |
| 325992 | Photographic Film, Paper, Plate, and Chemicals | W | W | W | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 326 | Plastics and Rubber Products | 92 | 55 | Q | 0 | 27 | Q | 0 | 0 | 0 | 0 |
| 327 | Nonmetallic Mineral Products | 104 | Q | Q | W | Q | W | W | W | W | 0 |
| 327211 | Flat Glass | W | W | 0 | 0 | 0 | W | 0 | 0 | 0 | 0 |
| 327212 | Other Pressed and Blown Glass and Glassware | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327213 | Glass Containers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327215 | Glass Products from Purchased Glass | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327310 | Cements | 6 | Q | W | W | Q | 0 | W | W | W | 0 |
| 327410 | Lime | W | W | 0 | 0 | W | W | 0 | 0 | 0 | 0 |
| 327420 | Gypsum | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 327993 | Mineral Wool | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 331 | Primary Metals | 30 | 5 | Q | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| 331111 | Iron and Steel Mills | 9 | W | W | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 331112 | Electrometallurgical Ferroalloy Products | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3312 | Steel Products from Purchased Steel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3313 | Alumina and Aluminum | 4 | W | 0 | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 331314 | Secondary Smelting and Alloying of Aluminum | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 331315 | Aluminum Sheet, Plate and Foils | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 331316 | Aluminum Extruded Products | W | W | 0 | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 3314 | Nonferrous Metals, except Aluminum | W | W | W | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 3315 | Foundries | W | 0 | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 10.5 Number of Establishments with Capability to Switch Residual Fuel Oil to Alternative Energy Sources, 2006;

Level: National Data;
Row: NAICS Codes;
Column: Energy Sources;
Unit: Establishment Counts.

| | | Residual Fuel Oil(b) | | | Alternative Energy Sources(c) | | | | | | |
|---------------|---|----------------------|------------|----------------|-------------------------------|-------------|---------------------|------|-----|----------------------|----------|
| NAICS Code(a) | Subsector and Industry | Total Consumed(d) | Switchable | Not Switchable | Electricity Receipts(e) | Natural Gas | Distillate Fuel Oil | Coal | LPG | Coal Coke and Breeze | Other(f) |
| 331511 | Iron Foundries | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 331521 | Aluminum Die-Casting Foundries | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 331524 | Aluminum Foundries, except Die-Casting | W | 0 | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 332 | Fabricated Metal Products | Q | 0 | Q | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 333 | Machinery | W | W | 0 | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 334 | Computer and Electronic Products | 7 | 6 | 5 | 0 | 6 | W | 0 | 0 | 0 | 0 |
| 334413 | Semiconductors and Related Devices | W | 0 | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 335 | Electrical Equip., Appliances, and Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 336 | Transportation Equipment | 111 | 18 | 89 | 0 | 18 | 0 | 0 | 0 | 0 | 0 |
| 336111 | Automobiles | W | W | W | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 336112 | Light Trucks and Utility Vehicles | W | W | 0 | 0 | W | 0 | 0 | 0 | 0 | 0 |
| 3364 | Aerospace Product and Parts | Q | 5 | Q | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| 336411 | Aircraft | W | 0 | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 337 | Furniture and Related Products | Q | W | W | 0 | 0 | W | 0 | 0 | 0 | 0 |
| 339 | Miscellaneous | Q | Q | W | 0 | W | W | 0 | 0 | 0 | 0 |
| | Total | 2,000 | 839 | 838 | 10 | 540 | 347 | 13 | 27 | W | |

(a) The Bureau of the Census classifies establishments using the North American Industry Classification System (NAICS).

(b) These counts include only those establishments that reported this activity in 2006.

(c) 'Alternative Energy Sources' consist of those energy sources that could have been substituted for residual fuel oil during 2006. The quantities are expressed in thousands of barrels, and therefore represent the quantity of residual fuel oil that could have been displaced by the given alternative type of energy.

(d) 'Total Consumed' represents those quantities (Total Inputs) of residual fuel oil that were ascertained switchable or not switchable, plus an additional quantity for which the switching status was not ascertained.

(e) 'Electricity Receipts' represents those quantities of electricity generated off the manufacturing establishment site and available at the site for consumption. It includes those quantities for which payment was made, quantities transferred in, quantities purchased and paid for by a central purchasing entity, and quantities for which payment was made in kind. It does not include electricity generated onsite. 'Electricity Receipts' has not been adjusted to account for any quantities that might have been resold or transferred out. The estimates include those quantities that were ascertained switchable or not switchable, plus an additional quantity for which the switching status was not ascertained.

(f) 'Other' includes all other types of energy not already identified that respondents indicated could have been consumed in place of residual fuel oil.

NF=No applicable RSE row/column factor.

* Estimate less than 0.5.

W=Withheld to avoid disclosing data for individual establishments.

Q=Withheld because Relative Standard Error is greater than 50 percent.

NA=Not available.

Notes: To obtain the RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Office of Energy Markets and End Use, Energy Consumption Division, Form EIA-846, '2006 Manufacturing Energy Consumption Survey.'